Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. (Previously presented) A contact assembly for use in an electrochemical deposition system to apply an electrical potential to a microelectronic workpiece, comprising:

a support member having an inner wall defining an opening configured to receive the workpiece and a plurality of posts projecting from the support member; and

a plurality of contacts mounted to the posts, wherein individual contacts include a conductor and a cover, the conductor comprising a proximal section projecting inwardly into the opening relative to the support member, a distal section extending from the proximal section, and an inert exterior at least at the distal section, and the cover comprising a dielectric material covering at least the proximal section of the conductor.

2. (Previously presented) The contact assembly of claim 1 wherein:

the support member comprises a conductive ring defining a conductive element and a dielectric exterior;

the cover of an individual contact comprises a dielectric sheath, and wherein the sheath has a bore and projects from a post; and

the conductor of the individual contact comprises a rod having a first section received in the bore of the sheath and a second section projecting outside of the sheath.

3. (Previously presented) The contact assembly of claim 1 wherein:

the support member comprises a dielectric ring having a conductive bus, and the posts project from the bus;

the cover of a contact comprises a dielectric sheath, and wherein the sheath has a bore and projects from one of the posts; and

the conductor of the contact comprises a rod having a first section received in the bore of a cover and a second section projecting outside of the sheath, and wherein the rods are electrically coupled to the conductive bus in the ring.

4. (Previously presented) The contact assembly of claim 1 wherein:

the support member comprises a ring having a conductive element coupled to the posts;

the cover of a contact comprises a dielectric sheath, and wherein the sheath has a bore and projects from one of the posts at an angle swept relative to a radius of the ring; and

the conductor of the contact comprises a rod having a first section received in the bore and a second section projecting outside of the sheath.

5. (Previously presented) The contact assembly of claim 1 wherein:

the support member comprises a ring having a conductive element coupled to the posts;

the cover of a contact comprises a dielectric sheath, and wherein the sheath has a bore and projects inwardly and upwardly from one of the posts; and

the conductor of the contact comprises a rod having a first section received in the bore and a second section projecting outside of the sheath.

6. (Previously presented) The contact assembly of claim 1 wherein:

the cover of a contact comprises a dielectric sheath, and wherein the sheath has a bore and projects inwardly into the opening; and

the conductor of the contact comprises a rod having a first section received in the bore and a second section projecting from the sheath.

7. (Previously presented) The contact assembly of claim 1 wherein a plurality of boots cover corresponding posts.

8. (Previously presented) The contact assembly of claim 1 wherein the conductor of an individual contact has an aperture through which a gas can flow.

9. (Previously presented) The contact assembly of claim 1 wherein the contacts are coupled to the support member by positionable connectors that allow the contacts to swivel with respect to the support member.

10. (Previously presented) The contact assembly of claim 1 wherein the cover comprises a dielectric sheath having a bore.

11. (Previously presented) The contact assembly of claim 1 wherein the conductor comprises a rod composed of platinum or a platinum/iridium alloy.

12. (Previously presented) The contact assembly of claim 1 wherein the conductor comprises a titanium rod having a platinum coating.

13. (Previously presented) The contact assembly of claim 1 wherein the conductor comprises a stainless steel rod.

14. (Previously presented) The contact assembly of claim 1 wherein the conductor comprises a tungsten rod.

15. (Previously presented) The contact assembly of claim 1 wherein the conductor comprises a tungsten rod having a platinum coating.

16-20. (Cancelled)

21. (Previously presented) A contact assembly for use in an electrochemical deposition system to apply an electrical potential to a microelectronic workpiece, comprising:

a support member having an inner wall defining an opening configured to receive the workpiece, a dielectric exterior, and an electrically conductive element within the dielectric exterior, the support member comprises a ring and a plurality of turrets; and

a contact system having a plurality of contacts projecting inwardly into the opening relative to the support member, the contacts including a conductor having a contact site with an inter surface and a dielectric cover over at least a portion of the conductor, and the conductor being electrically couple to the conductive element of the support member, wherein -

the covers of the contacts comprise dielectric sheaths, and wherein the sheaths have a bore and project from the turrets at an angle swept relative to a radius of the ring; and

the conductors of the contacts comprise rods having a proximal section received in the bore of a cover and a distal end projecting outside of the cover.

22-23. (Cancelled)

24. (Currently amended) A contact assembly <u>for use in an electrochemical deposition system to apply an electrical potential to a microelectronic workpiece, comprising</u>:

<u>a ring having an inner wall defining an opening configured to receive the workpiece, wherein</u> the ring has a conductive element, a dielectric exterior, and a plurality of turrets; and

a plurality of contacts projecting inwardly from the ring into the opening, the contacts comprising a dielectric element and a conductor having a first section in the dielectric element and a second section exposed relative to the dielectric element, wherein at least the second section of the conductor has an inert exterior, and wherein -

the dielectric elements comprise sheaths that have a bore and project from the turrets; and

the conductors of the contacts comprise rods having a proximal section received in the bore of a cover and a distal end projecting inwardly from the cover.

25. (Currently amended) A contact assembly for use in an electrochemical deposition system to apply an electrical potential to a microelectronic workpiece, comprising:

a ring having an inner wall defining an opening configured to receive the workpiece, whereinthe ring has a dielectric body, a conductive bus carried by the body, and a plurality of turrets;

the dielectric elements comprise sheaths that have a bore and project from the turrets; and

the conductors of the contacts comprise rods having a proximal section received in the bore of a sheath and a distal end projecting inwardly from the sheath, and wherein the rods are electrically coupled to the conductive bus in the ring.

26. (Previously presented) The contact assembly of claim 24 wherein:

the sheaths project from the turrets at an angle swept relative to a radius of the ring; and

the rods are partially received in the sheaths.

27. (Previously presented) The contact assembly of claim 24 wherein:
the sheaths project inwardly and upwardly from the turrets; and
the rods are partially received in the sheaths.

28-33. (Cancelled)

34. (Original) A contact assembly for use in an electrochemical deposition system to apply an electrical potential to a microelectronic workpiece, comprising:

a support member having a ring including an inner wall defining an opening configured to receive the workpiece and a plurality of turrets depending downwardly;

a plurality of dielectric sheaths coupled to the support member, wherein each sheath has a bore and projects from a corresponding turret inwardly into the opening; and

a plurality of conductors having a first section, a second section, and an inert exterior on at least the second section, wherein at least the first section of each conductor is received in the bore of a sheath.

35. (Original) The contact assembly of claim 34 wherein the conductors comprise platinum rods.

36. (Original) The contact assembly of claim 34 wherein the conductors comprise titanium rods having a platinum coating.

37. (Original) The contact assembly of claim 34 wherein the conductors comprise stainless steel rods.

38. (Original) The contact assembly of claim 34 wherein the conductors comprise tungsten rods.

39. (Previously presented) A reactor for electrochemical deposition processing of a microelectronic workpiece, comprising:

a vessel configured to hold a processing solution;

an electrode disposed relative to the vessel to provide an electrical potential in the vessel;

a head assembly moveable relative to the vessel between a load/unload position and a processing position; and

a contact assembly carried by the head assembly, wherein the contact assembly comprises -

a support member having an inner wall defining an opening configured to receive the workpiece and a plurality of posts projecting from the support member; and

a plurality of contacts mounted to the posts, wherein individual contacts include a conductor and a cover, the conductor comprising a proximal section projecting inwardly into the opening relative to the support member, a distal section extending from the proximal section, and an inert exterior at least at the distal section, and the cover comprising a dielectric element covering at least the proximal section of the conductor.

40. (Previously presented) The reactor of claim 39 wherein:

the support member comprises a ring having a conductive element and the posts comprise turrets; and

the contacts further comprise rods and dielectric sheaths along a proximal portion of the rods.

41-52. (Cancelled)

53. (Original) A reactor for electrochemical deposition processing of a microelectronic workpiece, comprising:

a vessel configured to hold a processing solution;

an electrode disposed relative to the vessel to provide an electrical potential in the vessel;

a head assembly moveable relative to the vessel between a load/unload position and a processing position; and

a contact assembly carried by the head assembly, wherein the contact assembly comprises -

a support member having a ring including an inner wall defining an opening configured to receive the workpiece and a plurality of turrets depending downwardly;

a plurality of dielectric sheaths coupled to the support member, wherein each sheath has a bore and projects from a corresponding turret inwardly into the opening; and

a plurality of conductors having a first section, a second section, and an inert exterior on at least the second section, wherein at least the first section of each conductor is received in the bore of a sheath.

54. (Original) The reactor of claim 53 wherein the conductors comprise platinum rods.

55. (Original) The reactor of claim 53 wherein the conductors comprise titanium rods having a platinum coating.

56. (Original) The reactor of claim 53 wherein the conductors comprise stainless steel rods.

57. (Original) The reactor of claim 53 wherein the conductors comprise tungsten rods.

58. (Previously presented) A tool for electrochemical processing of a microelectronic workpiece, comprising:

a cabinet;

a transfer mechanism; and

an electroplating reactor in the cabinet comprising a vessel configured to hold a processing solution, an electrode disposed relative to the vessel to provide an electrical potential in the vessel, a head assembly moveable relative to the vessel between a load/unload position and a processing position, and a contact assembly carried by the head assembly, wherein the contact assembly comprises -

a support member having an inner wall defining an opening configured to receive the workpiece and a plurality of posts projecting from the support member; and

a plurality of contacts mounted to the posts, wherein individual contacts have a conductor and a cover, the individual conductors comprising a proximal section projecting inwardly into the opening relative to the support member, a distal section extending from the proximal section, and an inert exterior at least at the distal section, and the individual covers comprising a dielectric material covering at least the proximal section of a corresponding individual one of the conductors.

59. (Previously presented) The tool of claim 58 wherein:

the support member comprises a ring having a conductive element, a dielectric exterior, and the posts comprise turrets; and

the conductors further comprise rods.

60. (Previously presented) The tool of claim 59 further comprising dielectric sheaths covering proximal sections of the rods.

61-64. (Cancelled)

65. (Original) The tool of claim 58 wherein the conductors comprise platinum rods.

66. (Original) The tool of claim 58 wherein the conductors comprise titanium rods having a platinum coating.

67. (Original) The tool of claim 58 wherein the conductors comprise stainless steel rods.

68. (Original) The tool of claim 58 wherein the conductors comprise tungsten rods.

69. (Original) A tool for electrochemical processing of a microelectronic workpiece, comprising:

a cabinet;

a transfer mechanism; and

an electroplating reactor in the cabinet comprising a vessel configured to hold a processing solution, an electrode disposed relative to the vessel to provide an electrical potential in the vessel, a head assembly moveable relative to the vessel between a load/unload position and a processing position, and a contact assembly carried by the head assembly, wherein the contact assembly comprises -

a support member having a ring including an inner wall defining an opening configured to receive the workpiece and a plurality of turrets depending downwardly;

a plurality of dielectric sheaths coupled to the support member, wherein each sheath has a bore and projects from a corresponding turret inwardly into the opening; and

a plurality of conductors having a first section, a second section, and an inert exterior on at least the second section, wherein at least the first section of each conductor is received in the bore of a sheath.

70. (Original) The tool of claim 69 wherein the conductors comprise platinum rods.

71. (Original) The tool of claim 69 wherein the conductors comprise titanium rods having a platinum coating.

72. (Original) The tool of claim 69 herein the conductors comprise stainless steel rods.

73. (Original) The tool of claim 69 herein the conductors comprise tungsten rods.

74. (Cancelled)